



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,044	05/02/2007	Thomas Kuenzi	10139/04402	5598
76960	7590	05/08/2009		
Fay Kaplun & Marcin, LLP 150 Broadway, suite 702 New York, NY 10038			EXAMINER WAGGLE, JR, LARRY E	
			ART UNIT 3775	PAPER NUMBER
			MAIL DATE 05/08/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/590,044

Applicant(s)

KUENZ ET AL.

Examiner

Larry E. Waggle, Jr

Art Unit

3775

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 11, 13 and 15 is/are rejected.
- 7) ☒ Claim(s) 4-10, 12 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/083)
- Paper No(s)/Mail Date 08/17/2008
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

First appearing on page 3, line 18, the term "bush" should be replaced with "bushing." The term "bush" is not acceptable in the context of the disclosure as pertains to the English language.

On page 8, line 8 the reference character "410b" should be replaced with "510b" to correctly identify the "proximal bone screw."

Appropriate correction is required.

Claim Objections

Claims 1-5, 11-12 and 14-15 are objected to because of the following informalities:

The term "bush" should be replaced with "bushing."

Appropriate correction is required.

Claims 4-10, 12 and 14 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-3, 11, 13 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the bone screw" on page 15, line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "the aiming device" on page 16, line 26; "the fragmented bone" on page 17, line 1; "the point of emergence" on page 17, line 4; "the distal, angle-stable screws" on page 17, lines 4-5; "the distal bone screw" on page 17, lines 12-13; and "the compression" on page 17, lines 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "the bow" on page 18, line 4; and "the contact element" on page 18, line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "the temporary fixing" on page 18, line 20. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Saunders et al. (EP 132284 A1).

Saunders et al. disclose an aiming device consisting of a U-shaped bow (1) having at least one contact element (7) at one end of the bow and, at the other end of the bow a screw spindle (5) movable towards the contact element having a rotary grip (4), and a drill bushing (8), characterized in that the drill bushing can be arranged at that end with the contact element and can be removed, the bone compression produced by means of the bow (i.e. the screw spindle) persisting after removal of the drill bushing for insertion of the bone screw (Figures 1-2; page 4, lines 1-4 and 23-24).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saunders et al. (EP 132284 A1) in view of Sher et al. (US Patent 4364381).

Saunders et al. disclose the claimed invention except for the contact element being designed as a rotationally movable adaptor bushing. Sher et al. teach a contact element (16) that is a rotationally movable adaptor bushing (Figure 1 and page 1, lines 48-64). It would have been obvious to a person having ordinary skill in that art at the time of the invention to construct the invention of Saunders et al. with the rotationally movable adaptor bushing in view of Sher et al. in order to allow movement of the contact member while tightening to avoid breaking the bone.

Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huebner et al. (US Publication 20040102788) in view of Beger (US Patent 6299616) in further view of Sher et al. (US Patent 4364381).

Huebner et al. discloses a method for inserting angle-stable long screws in an articular region of a bone, characterized in that, before the operation, a target plate (74) is screwed (138) to a bone plate (52) the target plate with the bone plate is attached to an aiming device (50), a drill bushing (60) is then inserted into an orifice (102) in the device, and the drill bushing on passing through the adaptor bushing, comes into contact with the bone (30) and is capable of coming into contact with a complimentary thread of the bone plate, whereupon everything is placed together on the bone and clamped by a detent mechanism (82) of the aiming device, to compress the implant to the bone, and fixed through the implant by means of a proximal bone screw (58), so that the point of emergence of the distal, angle-stable screws can be determined prior to drilling after everything has been correctly aligned, drilling can be effected through the integrated drill bushing, it being possible directly to determine the length of the screw to

be used and hence the depth of the hole to be drilled, in particular on the basis of a scale (60) mounted on the drill bushing and thereafter the distal bone screw (152) can be inserted while maintaining the compression of the bone (Figures 1-7 and page 5, paragraph 0055 – page 6, paragraph 0069).

Huebner et al. discloses the claimed invention except for the target plate with the lateral implant being mounted on the adaptor bushing of the aiming device by means of a plug connection. Beger teaches a plug connection for connecting inner (28) and outer (23) members (Figure 1; column 3, line 49 – column 4, line 7; and column 8, lines 10-20). It would have been obvious to a person having ordinary skill in that art at the time of the invention to construct the method of Huebner et al. with the plug connection in view of Beger in order to allow for ease of release of the target plate from the adapter bushing and for the target plate to be located in a number of positions with respect to the adaptor bushing.

Huebner et al. in view of Beger disclose the claimed invention except for the drill bushing passing through the adaptor bushing and the target plate wherein the drill bushing is removable while maintaining compression on the bone by a screw spindle. Sher teaches a removable drill bushing (42) passing through an adaptor bushing (16) wherein the drill bushing is capable of passing through the target plate and an aiming device (10) clamped by a screw spindle (14) (Figures 1 and 3 and column 2, line 42 – column 3, line 50). It would have been obvious to a person having ordinary skill in that art at the time of the invention to construct the method of Huebner et al. in view of Beger with the drill bushing passing through the adaptor bushing wherein the drill bushing is

capable of passing through the target plate and an aiming device clamped by a screw spindle in view of Sher et al. in order to maintain the compression of the clamp on the bone upon removal of the drill bushing for insertion of a bone screw.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huebner et al. (US Publication 20040102788) in view of Beger (US Patent 6299616) in further view of Sher et al. (US Patent 4364381) on further view of Dixon et al. (US Publication 2002/0087163).

Huebner et al. in view of Beger in further view of Sher et al. disclose the claimed invention except for temporarily fixing the target plate to the implant by means of the drill bushing via a thread connection. Dixon et al. teach fixing a drill bushing (34) to a target plate (33) by mean of a thread connection (38 and 39) (Figure 3 and page 3, paragraphs 0040-0041). It would have been obvious to a person having ordinary skill in that art at the time of the invention to construct the method of Huebner et al. in view of Beger in further view of Sher et al. with fixing the drill bushing to a target plate by mean of a thread connection in view of Dixon et al. in order to ensure that drilling is centered in the hole of the bone plate and that a secure, releasable connection is made between the drill bushing and the target plate.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larry E. Waggle, Jr whose telephone number is 571-

270-7110. The examiner can normally be reached on Monday through Thursday, 6:30am to 5pm, EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Barrett can be reached on 571-272-4746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Larry E Waggle, Jr/
Examiner, Art Unit 3775

/Thomas C. Barrett/
Supervisory Patent Examiner, Art
Unit 3775